

Unit Managers' Meeting: 100 Areas Remedial Action Unit/Source Operable Units

Mary Jarvis	DOE-RL, RP (A5-14)
Owen Robertson	DOE-RL, RP (A3-04)
Chris Smith	DOE-RL, RP (A3-04)
Mike Thompson	DOE-RL, RP (A6-38)
Arlene Tortoso	DOE-RL, RP (A6-38)
Kent Westover	DOE-RL, RP (A3-04)
Jon Yerxa	DOE-RL, RP (A5-15)
Lisa Treichel	DOE-HQ (EM-442)
John Price	WDOE (Kennewick) (B5-18)
Jean Vanni	WDOE (Kennewick) (B5-18)
Wayne Soper	WDOE (Kennewick) (B5-18)
Dennis Faulk	EPA (B5-01)
Randy Acselrod	Washington Dept. of Health
Debora McBaugh	Washington Dept. of Health
Richard Jaquish	Washington Dept. of Health
Eileen Murphy-Fitch	FD (A1-14)
John April	BHI (L6-06)
Jane Borghese	FH (E6-35)
Rich Carlson	BHI (H0-17)
Frank Corpuz	BHI (H0-17)
Rick Donahoe	BHI (X5-60)
Jack Donnelly	BHI (H0-17)
Jon Fancher	CHI (X5-60)
Ella Feist	CHI (H9-01)
Kim Koegler	BHI (H0-23)
Rex Miller	BHI (X3-40)
Robert Nielson	BHI (X9-08)
Walter Remsen	BHI (H0-17)
Debbie Roskelley	BHI (H0-17)
Annie Smet	BHI (H0-17)
Dean Strom	CHI (X3-40)
Jill Thomson	CHI (H9-01)
Joan Woolard	BHI (H0-02)
Administrative Record	BHI (H0-09) 2 copies

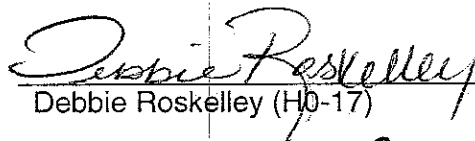
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EDMC

Please inform Debbie Roskelley (372-9562) – BHI (H0-17)
of deletions or additions to the distribution list.

Meeting minutes are attached. Minutes are comprised of the following:

Attachment 1	--	Attendance Sheet
Attachment 2	--	Agenda
Attachment 3	--	100 Area Meeting Minutes
Attachment 4	--	Groundwater Activities Handout
Attachment 5	--	WIDS Site CVP Closeout Summary Table
Attachment 6	--	Addendum 105-D/H Air Monitoring Plan
Attachment 7	--	Addendum to the Air Monitoring Plan for 116-N-1 (1301-N) Remedial Action
Attachment 8	--	100-BC Pipeline Remedial Action Map

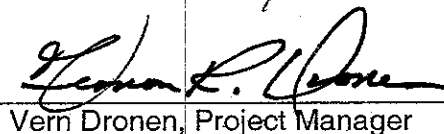
Prepared by:


Debbie Roskelley (H0-17)

Date

8/28/03

Concurrence by:


Vern Dronen, Project Manager
BHI Remedial Action and Waste Disposal Project (H0-17)

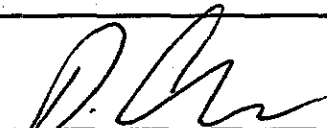
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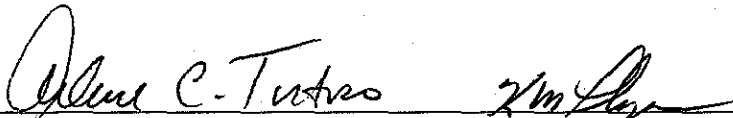
8/28/03

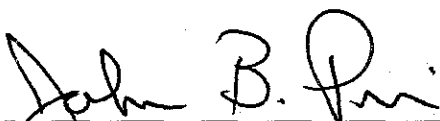
Meeting Minutes Transmittal/Approval
Unit Managers' Meeting


109385

100 Area Remedial Action and Waste Disposal Unit/Source Operable Unit
3350 George Washington Way, Richland, Washington
July 24, 2003

APPROVAL:  Date 8/28/03
Chris Smith/Jamie Zeisloft, 100 Area Unit Managers, RL (A3-04)

APPROVAL:  Date 8/28/03
Michael Thompson/ Arlene Tortoso, Waste Management
Division, RL (A6-38)

APPROVAL:  Date 8/28/03
John Price, 100 Aggregated Area Unit Manager, Ecology (B5-18)

APPROVAL:  Date 8-28-03
Dennis Faulk, 100 Aggregate Area Unit Manager, EPA (B5-01)

**Remedial Action and Waste Disposal Unit Managers' Meeting
Official Attendance Record – 100 Area
July 24, 2003**

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PRINTED NAME

O.U. ROLE

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100 AREA UNIT MANAGERS MEETING AGENDA

3350 George Washington Way

July 24, 2003

1:00 – 4:00 p.m. 3350 GWW (Room 1B45)

Administrative

- Meeting minutes status
- Review and approve last UMM minutes
- Next 100 UMM is August 28, 2003, at 1:00 – 4:00, 3350 GWW (1B45)

Groundwater

- 100 Area Open Action Items
- 100-Area Open forum and discussion
- 100-BC-5 and 100-FR-3 SAP status
- Recent change in tritium concentration near KE Fuel Storage Basin
- Status of aquifer tube installation project planning

100-BC-5 Groundwater OU

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100-FR-3 Groundwater OU

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100-HR-3 Groundwater OU

- Remediation treatment status

100-KR-4 Groundwater OU

- Remediation treatment status
- 100 K Burial Ground Soil Gas Investigation

100-NR-2 Groundwater OU

- Remediation treatment status

Review Open Action Items Log

General Crossover Items

- CVP status

D&D

- Submit approved *Addendum, 105-D/H Air Monitoring Plan*
- Project Status

Remedial Action

100 Area Common

- Remaining Sites ESD Status
- Remaining Sites Sampling Efforts Status
- 118-K-1 Design
- 100 F Burial Ground Design

100 F, K, and Group 4

- 100 F General Status
- 100 K General Status

100 N

- Project Status
- Test Pit at 116-N-1 Crib
- Crib Redesign

100 B/C

- Project Status

105F Fuel Storage Basin

- RAWD and D&D Interface at 105F Fuel Storage Basin
- Backfilling at 105 F Fuel Storage Basin by RAWD and D&D to support SSE subcontractor mobilization

Other

UNIT MANAGERS MEETING MINUTES

3350 George Washington Way, 1B45

July 24, 2003

1:00 – 3:00 p.m.

100 Area

3350 GWW, 1B45

Administrative

- Meeting Minute Status – June's meeting minutes were approved and signed by those in attendance.
- The next 100 Area Unit Managers Meeting will be held on August 28, 2003, at 3350 GWW room 1B45 starting at 1:00 p.m.

Groundwater

- 100 Area Open Action Items – Open Action Items were not provided.
- 100 Area Open Forum and Discussion – There were no items discussed.
- 100-BC-5 and 100-FR-3 SAP Status – The 100-BC-5 SAP was completed and delivered to EPA. The 100-FR-3 SAP was completed and submitted to DOE/RL for transmittal to EPA.
- Recent change in tritium concentration near KE Fuel Storage Basin – Bob Peterson (PNNL) reported that two wells in the vicinity the northwest corner of the KE fuel storage basin show increases in tritium in the most recent samples. The nearest source is in the shielding water in the KE and KW basins, but there is no evidence that the KE basin is losing water. The next regular round of sampling of the wells occurred today. A 15 day turn around was requested from the laboratory.
- Vern Johnson (FH) distributed Attachment 4, which provides a brief status of the Groundwater Project.
- 199-D5-39 Hot Spot Investigation – Vern Johnson (FH) reported that he is preparing a white paper requested by Wayne Soper discussing three new well locations. A new pump and treat system in the hot spot near the dichromate transfer station would increase resin costs by approximately \$1,000,000 per year.

100-BC-5 Groundwater OU

- Nothing to report

100-D Area

ISRM sampling was completed. Well D4-26 is the only one that shows chromium above the method detection limit (5 ug/L). The evaporation pond needs to be kept open for the time being.

100-HR-3 Groundwater OU

Remediation Treatment Status – The system operated at capacity except for a few short power outages.

100-KR-4 Groundwater OU

- Remediation Treatment Status – The system operated at capacity except for a few short power outages. Chromium in well 199-K-130 increased in the last sampling effort. The well will be sampled today.
- Soil Gas Status – Bob Peterson reported that there is a suspicion that the 118-K-1 Burial Ground is the origin of a tritium plume and elevated tritium in groundwater at the two monitoring wells in the vicinity the northwest corner of the KE fuel storage basin. They are using an auger drill to insert soil gas probes to a depth of 20 feet. They have installed about one-third of soil gas probes that will be needed to monitor the plume with good success. They expect to be done next week, then will wait two to three weeks before beginning soil gas sampling.

Larry Gadbois requested an email from Vern Johnson giving the estimated flow rate for well K-129.

100-NR-2 Groundwater OU

- Remediation Treatment Status – Things are running well at 100-NR-2.
- Planning continues for a workshop during the week of August 10-11 on riparian and aquatic groundwater at 100-N springs. The date of the workshop may need to be changed due to a conflict with another meeting for some of the participants.
- 199-N-18 waste profile – The petroleum hydrocarbon absorbent material “pig” is in the well. The material will be analyzed to determine acceptance criteria to comply with ERDF.

Review Open Action Items Log

- Open Action Items were not provided.

General Cross Over Items

- CVP Status – Alex Nazarali (BHI) handed out the WIDS Site CVP Closeout Summary Table (Attachment 5). Alex stated that the MP-14 information has been added to the summary table.
- Larry Gadbois (EPA) questioned what should be in the CVP to function better as a closeout report to meet the requirements of a standard CERCLA document. Ella Feist (CHI) stated that an internal meeting has been scheduled for 3:00 on July 24 to start discussions on this subject. They will look at the CVPs, EPA guidance, and Remedial Action reports, and do a comparison. A follow-up meeting will be scheduled to share the outcome of the meeting regarding the CVPS.

D&D

- 105-D/H Air Monitoring Plan Addendum – Ella Feist (CHI), acting for Robert Nielson (BHI), submitted the signed 105-D/H Air Monitoring Plan Addendum for inclusion in the meeting minutes (Attachment 6).
- 105-DR reactor CVP – Writing of the 105-DR reactor CVP is in progress.
- 105-D Reactor ISS – Fuel Storage Basin area is being backfilled with clean soil. The safe storage enclosure construction subcontract was awarded to FE&C. The design for the 100-D Area roof is in progress.
- 105-H Reactor ISS – Work continues to remove the lower fill, debris, spent fuel elements, etc. from the fuel storage basin.

100 Area Common

- Remaining Sites Sampling Efforts Status – The B/C, F, and 600 Area effort is complete. Comments on the waste site evaluation reports have been received from the regulators. The ERC is working through the comments and will report the resolutions in about two weeks. The plan is to make the waste site evaluation reports more CVP-like. There is a need to determine how these MP-14 reclassification forms roll up into remedial action reports to address the need for CERCLA documentation to close out these sites. This should be discussed in the CVP meeting being held.
- 118-K-1 Design Status – The 118-K-1 burial ground remedial design work will be completed in the next two weeks. Remediation will begin with workers in level D personal protection equipment instead of level B based upon experience and lessons learned during excavation of 300 Area burial grounds. This will be a significant cost avoidance.
- Air Monitoring Plan – The letter on the 118-K-1 air monitoring plan was signed by J. Hebdon (RL) today. There are two air monitors on site. The project needs to meet

with Larry Gadbois (EPA) and Jamie Zeisloft (RL) to talk about working outside the AOC.

- 100-F Burial Grounds Design – On target to complete by the end of the fiscal year.
- 100 Area Burial Grounds SAP - John Price (Ecology) stated that the transmittal of the 100 Area RDR/RAWP did not include the 100 Area Burial Ground SAP. He stated there are outstanding comments on the SAP. Ella Feist (CHI) said the Burial Ground SAP has not been reissued and there are no plans to revise the SAP in FY 04. John Price noted that he received an email from the Nez Perce stating they did not feel their comments had been addressed. They were planning to ask for a government to government consultation. They had requested biological sampling and did not like the answer that was given. John Price, John Sands, and Jamie Ziesloft are working on the plans to do a river corridor closeout document that would include a risk assessment. This will require planning documents, including a DQO and SAP, that should provide what the Nez Perce want. The Nez Perce will be informed when this is going to be done.

100-F, K and Group 4

- 100-F General Status – Mark Buckmaster (BHI) reported that Tom Kisenwether has left BHI and been replaced by Hal Downing (BHI). 100-F backfill is complete and one CVP is left to complete.
- 100-K General Status - 100-K Area condensate cribs and burial ground remedial actions were brought forward in the DWP, but are below the finding cut off line.
- Relocation of a power line at 100-K will require a 2-3 day power outage, which is anticipated in August on an A-schedule Friday off to carry over to Saturday or Sunday.
- 116-K-1 Crib – Removal of 25% of the overburden is complete. The bottom of the crib is contaminated. Pipelines toward the reactor area are being removed. The two 150-K heat recovery station buildings are being removed with the pipelines as proximity waste sites.
- Work is progressing on remediation of the 116-KW-3 the retention basin. Minor cleanup and removal of one more drainpipe are left to finish the remedial action. One hit of Semi-VOA COCs was noted during in-process sampling. This is suspected to be an asphalt chip similar to what was found at H Area. Everything else is clean. Will put a package together and meet with Larry Gadbois (EPA) prior to the next UMM to discuss elimination of Semi-VOAs as COCs.
- Test pit activity has been completed at the 100-K Mile Long Trench. No contamination or cultural resources were located. Contamination appears to be restricted to the near-surface area within 50 ft. of the center line of the trench. No

cultural resources were located at Pit 9. The probability of finding cultural resources during remediation is now believed to be low. There may be a problem with scattered human remains and cultural resources south of the cemetery.

100-N

- Project Status – Jon Fancher introduced Nelson Little who is the new 100-N Remedial Action Project Engineer.
- Project Update – All excavation is complete for the fiscal year, we have excavated all our funded tonnage.

The excavation subcontractor continues to decontaminate and demobilize, and should be gone in late August.

Other design subcontractor has completed an airborne trade off study, and we have given them a notice to proceed for redesign of the 116-N-1 crib. The redesign should be complete in September. As a follow up to Ecology's request for a briefing on the redesign Jon requested a meeting with Ecology next week to provide a briefing on the redesign effort. John Price (Ecology) would like to have the briefing after the 100-N area groundwater workshop (August 11 and 12).

- Air Monitoring – Jon Fancher requested John Price (Ecology) approve (sign) the air monitoring plan for 116-N-1. The signature copy was provided to John Price by Kent Westover (DOE/RL). John wanted to review an email prior to signing the plan, but would provide the plan (if approved) for inclusion in the UMM minutes (Attachment 7).
- 116-N-1 Test Pit – Jon Fancher provided an update on test pits excavated in the 116-N-1 crib in late June and early July. As a summary the crib boulder activity was not as high as anticipated. In the high activity layer below boulders, up to 260 mR/hr dose was recorded. Generally, concentrations decrease with depth and distance from the crib.
- 116-N-3 Excavation – Jon Fancher wanted to note that since the 116-N-3 excavation is complete the 116-N-3 air-monitoring plan is now closed out. Based on the closing out of 116-N-3 air monitoring plan, and approval of this addendum to the 116-N-1 air monitoring plan, air monitor N105 will be shut down.

100-B/C

- Project Status – Dean Strom (BHI) distributed a site map (Attachment 8). All segments of the process effluent pipelines will be removed by the end of the fiscal year. Less contamination is being encountered as they move close to C Reactor. A hexavalent chromium plume is now being cleaned up at B Reactor.

- Six waste sites will be sampled in mid-August to support the B/C Remaining Sites Sampling Project.
- Rex Miller (BHI) stated that they are saving time by doing a CVP for the area north of B Avenue. Backfilling will start in November. The project is going well.

Outstanding 100 Area Unit Manager's Meeting Action Items

June 2003 Actions

- **Frank Corpuz to send a copy of the 118-K-1 Burial Ground design to Larry Gadbois.**
- **Dennis Faulk asked Chris Smith to bring revegetation of 100-F backfilled areas above the FY04 funding line in the DWP.**

July 2003 Actions

- **Larry Gadbois requested an email from Vern Johnson giving the estimated flow rate for well K-129.**

100 Area UMM – July 2003

Groundwater operations activities for the period of June 16 through July 13, 2003 are summarized as follows.

D Area

- Monthly chromium results for selected D Area monitoring wells sampled the last week of June are similar to previous results. The highest concentration was 5030 ug/L for well 199-D5-39 (hot spot near the dichromate transfer station).
- Quarterly chromium concentrations are continuing a sharp upward trend in wells 199-D5-20, 199-D5-37 and D5-41 (see attachment). These wells will be added to the monthly schedule.
- Review of possible source locations and release mechanisms to account for the increasing concentrations is continuing. Potential treatment options are being considered.

100-HR-3

- The system operated at an average flow rate of 248 gpm.
- Run times were: 98% for the reporting period, 99% for FY 2003 to date and 92% since system inception.
- An initial review is underway of H Area groundwater data in relation to Interim Action Termination Criteria and the steps needed to reach a final remedy.

100-KR-4

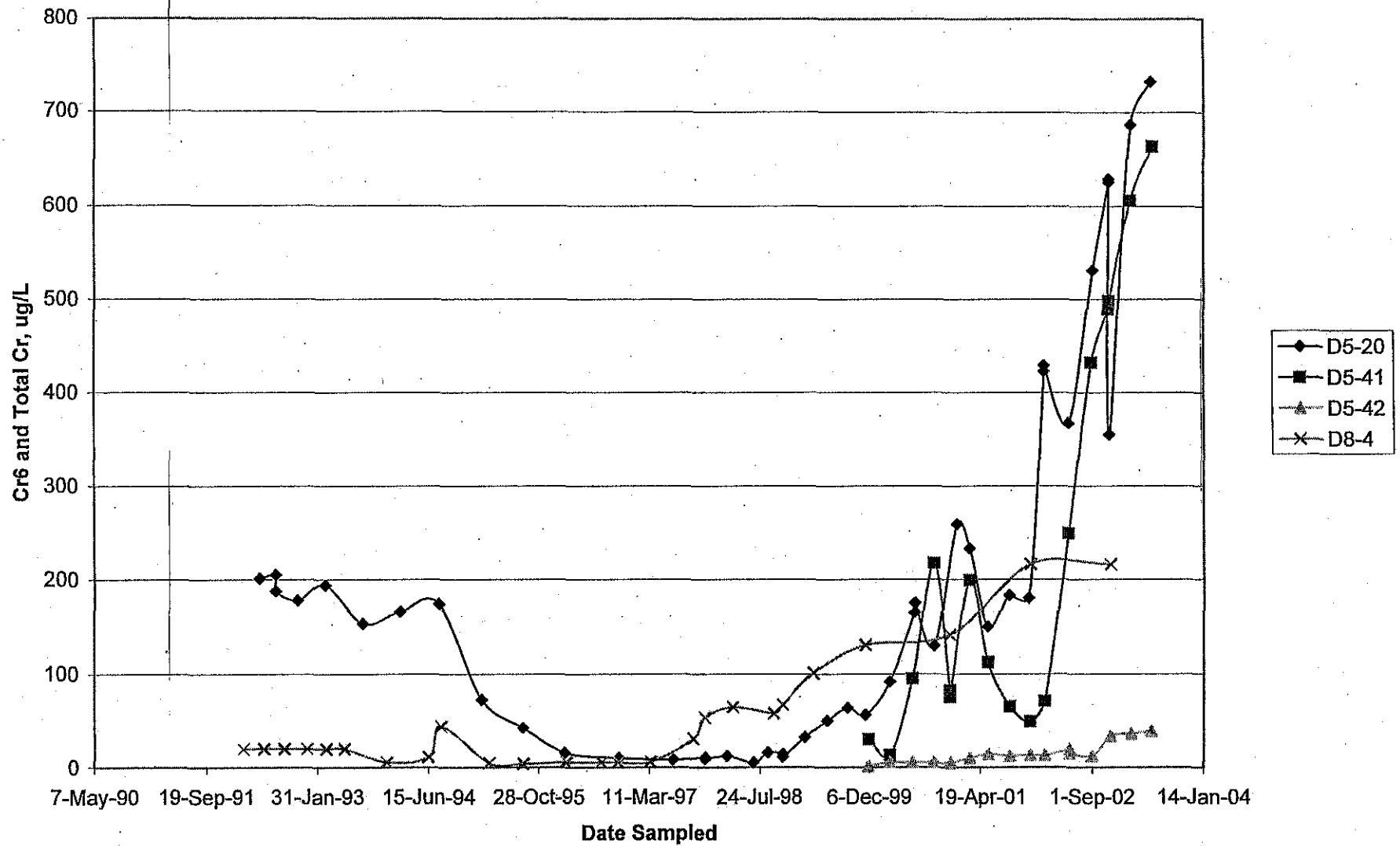
- The system operated at an average flow rate of 268 gpm during the report period.
- Run times were: 98% for the report period, 99% for FY03 to date and 95% since system inception.

- Replacement of extraction well K-112 with a new extraction well (K-129) was completed and the new well was placed in service during the report period.
- Hexavalent chromium concentration in well 199-K-130 increased to 68 ug/L on 6/25/03 as compared to 56 ug/L on 5/26/03. A meeting was held with EPA to consider the feasibility of converting 199-K-130 to an extraction well. Discussions on this issue are continuing.

100-NR-2

- The system operated at an average flow rate of 66 gpm for the report period.
- Run times were: 92 % for the report period, 96% for FY03 to date and 94% since system inception.
- Planning for the workshop on riparian and aquatic impacts/remediation at NR-2 continued. A professional facilitator for the meeting was obtained (Dee Willis, Columbia Energy) and an organizational meeting (Ecology, DOE and FH) was held to finalize the agenda and speaker arrangements. The workshop was extended to two days (August 11 and 12).
- Petroleum hydrocarbon removal using a passive method was initiated in well 199-N-18. The first "pig" will be analyzed for radioactive and hazardous waste constituents to comply with EDRF acceptance/disposal criteria.

199-D5-20 and D5-41 Filtered Chromium or Cr6



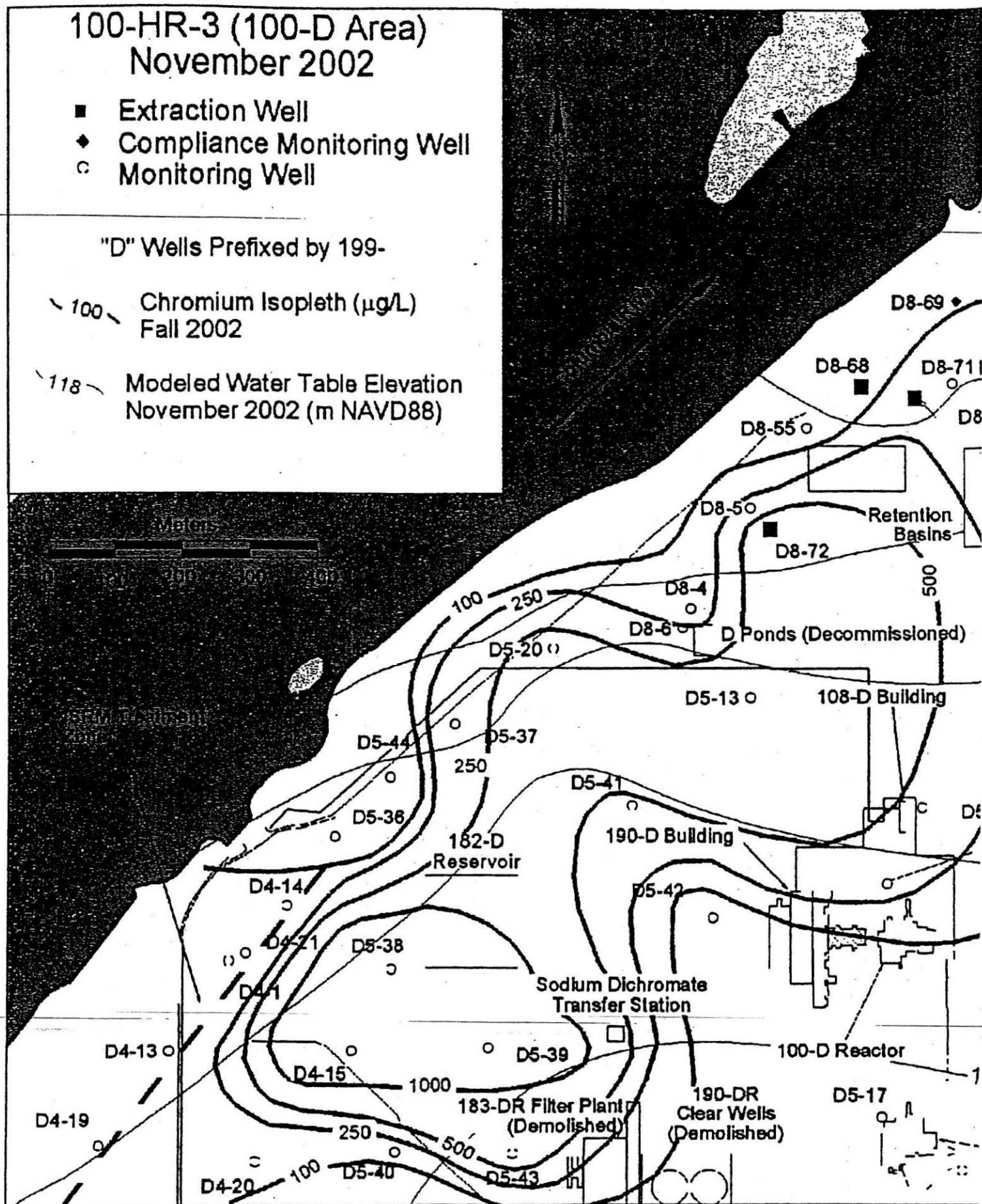
100-HR-3 (100-D Area) November 2002

- Extraction Well
- ◆ Compliance Monitoring Well
- Monitoring Well

"D" Wells Prefixed by 199-

100 Chromium Isopleth ($\mu\text{g/L}$)
Fall 2002

118 Modeled Water Table Elevation
November 2002 (m NAVD88)



WIDS Site CVP Closeout Summary Table

WIDS Site Closeout	CVP Doc. No. documenting WIDS site closeout	EPA/ Ecology WIDS Signoff	Issue Rev. 0 CVP
100 B/C Area			
116-B-13	CVP-1999-00002	7/22/99	7/1999
116-B-14	CVP-1999-00003	7/22/99	7/1999
116-C-1	CVP-1998-00006	1/21/99	1/1999
116-B-1	CVP-1999-00012	12/8/1999	12/1999
116-B-11	CVP-1999-00001	12/8/1999	12/1999
116-C-5	CVP-1999-00004	12/8/1999	12/1999
116-B-4	CVP-1999-00014	2/24/2000	3/3/2000
116-B-6B	CVP-1999-00017	2/24/2000	3/3/2000
116-B-9	CVP-1999-00009	2/24/2000	3/3/2000
116-B-2	CVP-1999-00015	2/24/2000	3/3/2000
116-B-3	CVP-1999-00013	2/24/2000	3/3/2000
116-B-10	CVP-1999-00010	2/24/2000	3/3/2000
116-B-12	CVP-1999-00008	2/24/2000	3/3/2000
116-C-2A			
116-C-2B	CVP-1999-00019	3/15/2000	3/28/1999
116-C-2C			
116-B-6A	CVP-1999-00011	5/17/2000	5/26/2000
116-B-16			
116-B-7			
132-B-6	CVP-2002-00003	7/25/2002	8/6/2002
132-C-2			
BC Pipeline	CVP-2002-00012	(in progress 9/30/03)	
100-B-5	CVP-2003-00014	6/18/2003	Pending
1607-B7	CVP-2003-00004	5/27/2003	Pending
1607-B8	CVP-2003-00005	5/27/2003	Pending
1607-B9	CVP-2003-00006	6/19/2003	Pending
1607-B10	CVP-2003-00007	5/27/2003	Pending
1607-B11	CVP-2003-00008	5/27/2003	Pending
100-C-3	CVP-2003-00009	5/27/2003	Pending
118-C-4	CVP-2003-00015	6/25/2003	Pending
100 D Area			
100-D-4 (107D5)	CVP-98-00004	3/25/1999	3/1999
100-D-20 (107D3)	CVP-98-00003	3/25/1999	3/1999
100-D-21(107D2)	CVP-98-00002	3/25/1999	3/1999
100-D-22 (107D1)	CVP-98-00001	3/25/1999	3/1999
1607-D2		closed	
1607-D2:1 Tile Field	CVP-98-00005	3/25/1999	3/1999
Septic Pipelines	CVP-2000-00004	9/26/2000	9/2000
Septic Tank	CVP-99-00005	11/23/1999	12/1999
116-DR-9	CVP-99-00006	1/6/2000	1/2000
100-D-25			
116-D-7	CVP-99-00007	8/15/2000	8/2000
100-D-18 (107D4)	CVP-2000-00001	9/26/2000	10/2/2000
116-DR-1	CVP-2000-00002	9/26/2000	9/27/2000
116-DR-2			
100-D-48		closed	
100-D-48:1 (Grp 2 North Pipelines)	CVP-2000-00003	3/14/2001	3/2001
100-D-48:2 (Grp 2 West Pipelines)	CVP-2000-00005	9/26/2000	10/2/2000
100-D-48:3 (Grp 3 Large Pipelines)	CVP-2000-00034	4/20/2001	4/20/2001
100-D-48:4 (Grp 3 Small Pipelines)	CVP-2000-00033	4/17/2001	4/20/2001
100-D-19			
UPR-100-D-4	CVP-2000-00003	3/14/2001	3/2001
100-D-49		closed	
100-D-49:1 (Grp 2 North Pipelines)	CVP-2000-00003	3/14/2001	3/2001
100-D-49:2 (Grp 2 East Pipelines)	CVP-2000-00005	9/26/2000	10/2/2000
100-D-48:3 (Grp 3 Large Pipelines)	CVP-2000-00034	4/20/2001	4/20/2001

WIDS Site CVP Closeout Summary Table

WIDS Site Closeout	CVP Doc. No. documenting WIDS site closeout	EPA/ Ecology WIDS Signoff	Issue Rev. 0 CVP
100 D Area (cont.)			
UPR-100-D-2	CVP-2000-00005	9/26/2000	10/2/2000
UPR-100-D-3			
100-D-5	CVP-2000-00034	4/20/2001	4/20/2001
100-D-6			
116-D-3	no CVP site rejected	5/17/2000	N/A
116-D-4	CVP-2000-00008	10/23/2000	10/31/2000
116-D-6	CVP-2000-00009	11/7/2000	11/9/2000
116-D-1A	CVP-2000-00010	3/12/2001	3/2001
116-D-1B			
100-D-46			
116-D-2	CVP-2000-00013	10/23/2000	10/25/2000
116-DR-6	CVP-2000-00014	10/23/2000	10/24/2000
116-DR-4	CVP-2000-00015	10/23/2000	10/25/2000
100-D-12	CVP-2000-00016	10/23/2000	10/26/2000
100-D-52	CVP-2000-00018	11/7/2000	11/9/2000
116-DR-7	CVP-2000-00019	9/26/2000	10/2/2000
116-D-9	CVP-2000-00012	3/23/2001	3/23/2001
100 H Area			
1607-H2	CVP-2000-00024	2/5/2001	2/2001
1607-H4	CVP-2000-00025	2/26/2001	2/26/2001
116-H-1	CVP-2000-00026	4/4/2001	4/11/2001
116-H-7	CVP-2000-00027	7/24/2001	8/1/2001
100-H-5	CVP-2000-00028	12/21/2000	12/21/2000
100-H-17	CVP-2000-00031	3/6/2001	3/8/2001
116-H-2			
100-H-2			
100-H-30			
100-H-21	CVP-2000-00029	3/29/2001	3/29/2001
100-H-22			
100-H-1			
100-H-24	CVP-2000-00030	5/9/2001	5/2001
116-H-3	CVP-2000-00032	4/3/2001	4/11/2001
100 N Area			
120-N-1	CVP-2001-00021	3/28/2002	4/18/2002
120-N-2			
100-N-58			
116-N-3	CVP-2002-00002	9/26/2002	12/23/2002
100 Area Misc. & 300 Area			
JA Jones	CVP-2001-00019	11/8/2001	12/10/2001
600-23	CVP-2001-00020	11/30/2001	12/17/2001
300-49 (Landfill 1A)	CVP-2000-00020	1/12/2003	6/9/2003
300-50 (Landfill 1B)	CVP-2000-00021	1/27/2003	6/9/2003
628-4 (Landfill 1D)	CVP-2003-00001	4/10/2003	7/22/2003
316-1(South Process Pond)	CVP-2003-00002	4/10/2003	7/22/2003

WIDS Site CVP Closeout Summary Table

WIDS Site Closeout	CVP Doc. No. documenting WIDS site closeout	EPA/ Ecology WIDS Signoff	Issue Rev. 0 CVP
100 F Area			
116-F-4	CVP-2001-00006	11/8/2001	11/15/2001
116-F-5	CVP-2001-00007	8/16/2001	8/23/2001
1607-F6	CVP-2001-00010	11/8/2001	11/15/2001
UPR-100-F2	CVP-2001-00011	4/22/2002	5/7/2002
100-F-19:1	CVP-2001-00002	5/21/2002	6/10/2002
100-F-19:3			
100-F-34			
116-F-12			
100-F-40	site closed (No CVP)	2/15/2002	2/15/2002
116-F-14	CVP-2001-00009	7/11/2002	7/18/2002
100-F-2	CVP-2001-00001	7/25/2002	8/5/2002
100-F-15	CVP-2002-00001	7/25/2002	8/6/2002
100-F-4			
100-F-11			
100-F-16			
116-F-9	CVP- 2001-00008	10/16/2002	10/22/2002
116-F-2	CVP- 2001-00005	1/13/2003	3/11/2003
126-F-1	CVP- 2002-00002	1/13/2003	TBD
100-F-35	CVP-2002-00007	4/15/2003	6/16/2003
116-F-1	CVP-2002-00009	5/22/2003	Pending
116-F-3	CVP-2002-00008	4/15/2003	6/16/2003
116-F-6	CVP-2002-00010	5/19/2003	Pending
116-F-10	CVP-2002-00006	4/15/2003	6/16/2003
1607-F2	CVP-2002-00005	1/13/2003	3/11/2003
100-F-19:2	CVP-2001-00003	5/27/2003	Pending
116-F-11			
UPR-100-F-1			
100-F-29			
UPR-100-F-3	CVP-2003-10	6/9/2003	Pending
100-F-25			
100-F-23	CVP-2003-11	6/9/2003	Pending
100-F-24	CVP-2003-12	6/9/2003	Pending

WIDS Site CVP Closeout Summary Table

WIDS Site Closeout	MP-14 Doc. No. documenting WIDS site closeout	EPA/ Ecology WIDS Signoff	Issue Rev. 0 MP-14
100-B-3	CCN 1066327	6/12/2003	
116-B-15	CCN 1066327	6/12/2003	
132-B-1	CCN 1066327	6/12/2003	
132-B-3	CCN 1066327	6/12/2003	
132-B-4	CCN 1066327	6/12/2003	
132-B-5	CCN 1066327	6/12/2003	
116-C-6	CCN 108263	6/24/2003	
132-C-1	CCN 1066327	6/12/2003	
132-C-3	CCN 1066327	6/12/2003	
128-D-1	CCN 1066327	6/12/2003	
128-F-1	CCN 108263	6/24/2003	
100-F-28	CCN 1066327	6/12/2003	
132-F-3	CCN 1066327	6/12/2003	
132-F-4	CCN 1066327	6/12/2003	
132-F-5	CCN 1066327	6/12/2003	
132-F-6	CCN 1066327	6/12/2003	
100-K-30	CCN 108263	6/24/2003	
600-52	CCN 108263	6/24/2003	
600-99	CCN 108263	6/24/2003	
600-107	CCN 108263	6/24/2003	
600-128	CCN 108263	6/24/2003	
600-131	CCN 108263	6/24/2003	
600-132	CCN 108263	6/24/2003	
600-139	CCN 108263	6/24/2003	
600-181	CCN 108263	6/24/2003	
600-190	CCN 108263	6/24/2003	
600-201	CCN 108263	6/24/2003	
600-204	CCN 108263	6/24/2003	
628-1	CCN 108263	6/24/2003	

Addendum

105-D/H Air Monitoring Plan

May 5, 2003

1.0 Purpose

This document is prepared as an addendum to the *Air Monitoring Plan*, Appendix B of the *Removal Action Work Plan for 105-D and 105-H Building Interim Safe Storage Projects and Ancillary Buildings* (DOE/RL 2002).

2.0 Scope

Revisions to the Air Monitoring Plan (AMP) as described in this document apply to all Decommissioning Project activities conducted at the 105-D and 105-H Reactor Facilities.

3.0 Background

Significant changes in project activities that could adversely affect the annual potential to emit (PTE) are assessed continuously by the project. The following changes have occurred at the project, prompting the preparation of this addendum to the AMP.

3.1 105-D Reactor

Decommissioning Projects encountered a radiological hot spot in the soil adjacent to the 105-D Reactor south discharge chute in the fuel storage basin (FSB) area. Processes very similar to those conducted to address hot spots in the 105-H FSB were employed to identify and disposition this source, which was subsequently identified as an intact spent fuel element. The element was removed and stored in a secure manner and, like other fuel elements from the 105-F FSB, will be packaged and shipped to the K Basins. The radiological inventory for this element was added into the source term as discussed in Section 4.0.

Four shipping casks found in the 105-D Reactor FSB Transfer Bay area were opened for characterization purposes. The casks were heavily shielded with a small cavity in the center for the radioactive payload. Three out of the four casks' cavities contained small amounts of water that was subsequently pumped into waste containers. After the water was removed, radiation surveys and smears were taken inside the empty cavities (BHI 2003a). Although the surveys and smears did contain noteworthy levels of radiation and contamination, the amount of total radioactivity is considered negligible in relation to levels discussed in the 105-D Air Monitoring Plan (DOE/RL 2002) and this addendum. The minimal volume of water was consumed in characterization sampling. The remaining contamination was fixed and the casks were disposed of at the ERDF.

3.2 105-H Reactor

A review of characterization data of the 105-H Reactor FSB lower fill material (collected in November 2002) determined that there are additional isotopes not accounted for in the original calculation. Therefore, the sampling analysis data will form the new basis for the radioactive inventory of the soil/sediment. Specifically included in the sampled media was the most contaminated material present on the FSB floor in a layer approximately 2" in thickness (on average). These changes to the radiological inventory have been reflected in the source term as discussed in Section 4.0. The PTE will remain the same.

During planning activities, data from the 105-F FSB were assumed to apply to conditions in the 105-H FSB. As work activities proceeded, removable contamination levels noted in areas of the 105-H FSB floor exceeded those observed at the 105-F FSB. However, radioactive source term, physical form, and associated RF assumptions were reviewed and determined to be bounding. However, to further minimize the potential for fugitive emissions from the floor of the FSB, additional radiological engineering controls may be used. These additional controls are identified in Section 4.0.

4.0 Discussion

To account for the inventory and activity changes discussed in the previous section, a revised calculation (BHI 2003b) was prepared to calculate the PTE, and the resulting unabated off-site dose to the maximally exposed individual (MEI) from planned Decommissioning Projects activities conducted at the 105-D and 105-H Reactor Facilities. The resultant revised total unabated off-site dose to the MEI from D&D activities at the 105-D and 105-H Reactor Facilities is $3.90\text{E-}4$ mrem/yr and $1.20\text{E-}2$ mrem/yr, respectively.

Based on the discussion in the preceding sections, the following are the proposed changes to the AMP:

- Page B-1, Section B.1, 2nd paragraph: After the 1st sentence, insert the following new sentences: "The 1720-HA Arsenal has no history of processing, using, or storing radioactive materials. Radiological survey measurement information (BHI 2003a) confirms that no contamination exists in this facility. Therefore, revision of this plan is not required for D&D of this facility." Revise the last sentence to read "However, prior to D&D of the 190-DR Process Water Pump house and 1713-H Warehouse, when....."
- Page B-2, Section B1.1.1, list of bullets: Add the following bullets:
 - "Removal of the sediment/backfill, and irradiated fuel in the 105-H FSB
 - Removal of irradiated fuel in the 105-D FSB
 - Construction of the SSE"
- Page B-4, Section B.2, 1st paragraph: After the 2nd sentence, insert the following new sentence: "In addition, the inventory for a single fuel element was taken from *Final*

Hazard Classification and Auditable Safety Analysis for the 105-H Facility Interim Safe Storage Project (2000c)."

- Page B-4, Section B.2, 1st paragraph: After 3rd sentence, insert the following new sentence: "The soil/sediment radiological inventory is based on characterization data for the lower fill, which is summarized in the *Air Emissions Calculation for Demolition Activities at the 105-D and 105-H Buildings* (BHI 2003b)."
- Page B-4, Section B.2, 2nd paragraph, 3rd sentence: Change to read "For about 95% of the demolition activities (e.g., with excavators, use of controlled explosive, etc.) a release fraction of 1E-3 will be used (per WAC 246-247-030), while it is assumed that 5% of the demolition activities will involve the use of HEPA filtered vacuums and aggressive decontamination and a release fraction of 1 will be used (per Department of Health letter AIR 94-802)."
- Page B-4, Section B.2, 3rd paragraph, last sentence: Change to read "Details of the calculations are documented in Bechtel Hanford, Inc. (BHI) 2003b."
- Page B-4, Section B.2, 4th paragraph: After the 1st sentence, insert the following new sentence: "The 105-D FSB contains a single irradiated fuel element."
- Page B-4, Section B.2, 4th paragraph, last sentence: Change to read "Details of the calculations are documented in BHI (2003b)."
- Page B-5, Section B.2, 2nd paragraph, 4th sentence: Change reference to "BHI 2003b."
- Page B-5, Section B.2, 2nd paragraph, last sentence: Change doses from 105-D and 105-H reactors to "3.90E-4" and "1.20E-2" mrem/yr, respectively.
- Page B-5, Section B.2, 3rd paragraph, 2nd sentence: Change reference to "BHI 2003b."
- Page B-6, Section B.3, list of bullets: Add the following bullets:
 - "A small amount of soil and/or water will remain on the floor of the FSB, except when determining if fuel is present or following application of floor fixative.
 - Squeegee-type attachments will be used on the excavators in the FSB to minimize metal to concrete floor contact.
 - As it is being manipulated, FSB soil/sediment will be mixed with water/fixatives.
 - After removal of the soil/sediment, fixatives will be applied to the floor of the FSB."
- Page B-7, Section B.5: Add new 4th reference as follows:

"BHI, 2003a, *Radiological Survey Record*, RSR 105H-03-0264, Bechtel Hanford, Inc., Richland, Washington."
- Page B-7, Section B.5, 4th reference: Change reference to "BHI 2003b."
- Page B-11, Table B-1: Replace with the following table:

Isotope	Support Areas (Modules 1 and 2)				FSB				Fuel Element		Modules + FSB + Fuel = Total PTE (Ci/yr)	Unabated Offsite Dose (mrem/yr) ^e
	APQ (Ci/yr)	PTE (1E-3) ^b (Ci/yr)	PTE (1.0) ^b (Ci/yr)	PTE (Total) (Ci/yr)	APQ (Ci/yr)	PTE (1E-6) ^c (Ci/yr)	PTE (1E-3) ^c (Ci/yr)	PTE (Total) (Ci/yr)	APQ (Ci/yr)	PTE (1.8E-5) ^d (Ci/yr)		
Ni-59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E-03	1.90E-09	1.00E-07	1.02E-07	0.00E+00	0.00E+00	1.02E-07	2.65E-11
Co-60	2.98E-05	2.83E-08	1.49E-06	1.52E-06	9.06E-03	8.61E-09	4.53E-07	4.62E-07	0.00E+00	0.00E+00	1.98E-06	2.75E-07
Ni-63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.47E-01	2.35E-07	1.24E-05	1.26E-05	0.00E+00	0.00E+00	1.26E-05	3.58E-09
Sr-90	4.28E-02	4.07E-05	2.14E-03	2.18E-03	4.39E-02	4.17E-08	2.20E-06	2.24E-06	1.17E+01	2.11E-04	2.39E-03	2.24E-04
Y-90 ^f	4.28E-02	4.07E-05	2.14E-03	2.18E-03	4.39E-02	4.17E-08	2.20E-06	2.24E-06	1.17E+01	2.11E-04	2.39E-03	4.87E-07
Cs-137	1.83E-03	1.74E-06	9.15E-05	9.32E-05	8.90E-02	8.46E-08	4.45E-06	4.53E-06	1.19E+01	2.14E-04	3.12E-04	1.04E-05
Ba-137m ^f	1.73E-03	1.64E-06	8.65E-05	8.81E-05	8.42E-02	8.00E-08	4.21E-06	4.29E-06	1.12E+01	2.02E-04	2.94E-04	1.67E-13
Eu-152	1.94E-04	1.84E-07	9.70E-06	9.88E-06	1.01E-02	9.60E-09	5.05E-07	5.15E-07	4.80E-05	8.64E-10	1.04E-05	1.38E-06
Eu-154	4.71E-05	4.47E-08	2.36E-06	2.40E-06	2.42E-03	2.30E-09	1.21E-07	1.23E-07	0.00E+00	0.00E+00	2.52E-06	2.71E-07
Pu-239	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-02	2.28E-08	1.20E-06	1.22E-06	4.80E-01	8.64E-06	9.86E-06	7.81E-05
Am-241	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.84E-03	7.45E-09	3.92E-07	3.99E-07	2.18E-01	3.92E-06	4.32E-06	5.26E-05
Se-79	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-05	1.44E-09	1.44E-09	0.00E+00
Zr-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-04	1.44E-08	1.44E-08	1.85E-11
Nb-94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.20E-04	5.76E-09	5.76E-09	3.45E-09
Tc-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-01	7.20E-06	7.20E-06	1.42E-07
Pd-107	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-06	1.44E-10	1.44E-10	5.25E-14
Cd-113	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.00E-04	1.44E-08	1.44E-08	0.00E+00
Sm-151	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.44E-01	2.59E-06	2.59E-06	1.91E-09
Pu-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.20E-03	1.30E-07	1.30E-07	9.54E-07
U-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.40E-03	4.32E-08	4.32E-08	1.15E-07
Pu-240	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E-01	2.16E-06	2.16E-06	1.71E-05
Pu-241	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.14E+00	3.85E-05	3.85E-05	4.78E-06
TOTAL												3.90E-04

^aThe information for this table was obtained from BHI calculation number 0100X-CA-V0035, Rev. 3 (BHI 2003b).

^bConservatively, 95% of the inventory is assumed to have a release fraction of 1E-3 and 5% is assumed to have a release fraction of 1.0.

^cConservatively, 95% of the inventory is assumed to have a release fraction of 1E-6 and 5% is assumed to have a release fraction of 1E-3.

^dThe same release fraction as the 105-H fuel (1.8E-5) is used due to possible oxide layers on the outside of the fuel.

^eThe annual unabated dose was determined using the CAP-88 model. The PTE (Ci/yr) was the input, and the model generated the annual unabated dose. The distance to the MEI is 9,776 m to the west-northwest of the 105-D Reactor Facility. The CAP88 model summary and synopsis is presented in BHI calculation Number 0100X-CA-V0035, Rev. 3 (BHI 2003b).

^fThe total PTE for Sr-90 was used for Y-90.

^gThe total PTE for Ba-137m was 94.6% of Cs-137.

APQ = annual possession quantity.

FSB = Fuel Storage Basin

PTE = potential-to-emit

- Page B-12, Table B-2: Replace with the following table:

Isotope	Support Areas (Modules 1 and 2)				FSB				Modules + FSB = Total PTE (Ci/yr)	Unabated Offsite Dose (mrem/yr)*
	APQ (Ci/yr)	PTE (1E-3) ^b (Ci/yr)	PTE (1.0) ^b (Ci/yr)	PTE (Total) (Ci/yr)	APQ (Sediment) (Ci/yr) ^c	APQ (50 Fuel Elements) ^c (Ci/yr)	Total APQ (Ci/yr)	PTE (1.8E-5) ^d (Ci/yr)		
Ni-59	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.94E-02	0.00E+00	6.94E-02	1.25E-06	1.25E-06	4.51E-10
Co-60	2.98E-05	2.83E-08	1.49E-06	1.52E-06	2.24E-01	0.00E+00	2.24E-01	4.03E-06	5.55E-06	1.07E-06
Ni-63	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.13E+00	0.00E+00	8.13E+00	1.46E-04	1.46E-04	5.78E-08
Se-79	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-03	4.00E-03	7.20E-08	7.20E-08	0.00E+00
Sr-90	4.28E-02	4.07E-05	2.14E-03	2.18E-03	1.07E+00	5.86E+02	5.87E+02	1.06E-02	1.27E-02	1.65E-03
Y-90 ^e	4.28E-02	4.07E-05	2.14E-03	2.18E-03	1.07E+00	5.86E+02	5.87E+02	1.06E-02	1.27E-02	3.64E-06
Zr-93	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-02	4.00E-02	7.20E-07	7.20E-07	1.30E-09
Nb-94	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.60E-02	1.60E-02	2.88E-07	2.88E-07	2.40E-07
Tc-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.00E+01	2.00E+01	3.60E-04	3.60E-04	9.84E-06
Pd-107	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-04	4.00E-04	7.20E-09	7.20E-09	3.68E-12
Cd-113	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.00E-02	4.00E-02	7.20E-07	7.20E-07	0.00E+00
Cs-137	1.83E-03	1.74E-06	9.15E-05	9.32E-05	1.51E+00	5.94E+02	5.96E+02	1.07E-02	1.08E-02	4.98E-04
Ba-137m ^f	1.73E-03	1.64E-06	8.65E-05	8.81E-05	1.43E+00	5.60E+02	5.61E+02	1.01E-02	1.02E-02	9.02E-12
Sm-151	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.22E+00	7.22E+00	1.30E-04	1.30E-04	1.34E-07
Eu-152	1.94E-04	1.84E-07	9.70E-06	9.88E-06	1.05E+00	2.40E-03	1.05E+00	1.89E-05	2.88E-05	5.32E-06
Eu-154	4.71E-05	4.47E-08	2.36E-06	2.40E-06	1.59E-01	0.00E+00	1.59E-01	2.86E-06	5.26E-06	7.85E-07
Pu-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-03	3.60E-01	3.67E-01	6.61E-06	6.61E-06	6.81E-05
U-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	1.20E-01	1.21E-01	2.18E-06	2.18E-06	8.13E-06
Pu-239	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.79E-01	2.40E+01	2.42E+01	4.35E-04	4.35E-04	4.84E-03
Pu-240	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.00E+00	6.00E+00	1.08E-04	1.08E-04	1.20E-03
Am-241	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.53E-02	1.09E+01	1.10E+01	1.97E-04	1.97E-04	3.37E-03
Pu-241	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.67E-01	1.07E+02	1.07E+02	1.93E-03	1.93E-03	3.36E-04
Ba-133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.03E-03	0.00E+00	1.03E-03	1.85E-08	1.85E-08	1.02E-09
C-14 (Total)	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.64E+00	0.00E+00	1.64E+00	2.95E-05	2.95E-05	8.73E-08
Eu-155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.47E-03	0.00E+00	9.47E-03	1.70E-07	1.70E-07	1.13E-09
H-3 ^h	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.17E-02	0.00E+00	4.17E-02	4.17E-02	4.17E-02	2.23E-06
K-40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.21E-03	0.00E+00	9.21E-03	1.66E-07	1.66E-07	2.52E-08
Np-237	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-04	0.00E+00	1.40E-04	2.52E-09	2.52E-09	3.94E-08
Ra-226	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.54E-03	0.00E+00	1.54E-03	2.77E-08	2.77E-08	1.69E-08
Ra-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.37E-03	0.00E+00	3.37E-03	6.07E-08	6.07E-08	1.51E-08
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E-04	0.00E+00	3.25E-04	5.85E-09	5.85E-09	4.43E-08
Th-230	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.13E-04	0.00E+00	3.13E-04	5.63E-09	5.63E-09	4.26E-08
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.16E-04	0.00E+00	3.16E-04	5.69E-09	5.69E-09	6.16E-08
U-233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.22E-03	0.00E+00	1.22E-03	2.20E-08	2.20E-08	9.33E-08
U-235	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-04	0.00E+00	1.26E-04	2.27E-09	2.27E-09	9.01E-09
TOTAL										1.20E-02

*The information for this table was obtained from BHI calculation number 0100X-CA-V0035, Rev. 3 (BHI 2003b).

^bConservatively, 95% of the inventory is assumed to have a release fraction of 1E-3 and 5% is assumed to have a release fraction of 1.0.

^cThe APQ is based on the bounding sediment and 50 bounding fuel elements (0100X-CA-V0035).

^dThe sediment in the FSB is assumed to have a release fraction of 1.8E-5, as stated in AP-42, Table 11.9-4 (EPA 1998). Conservatively, the same release fraction as the sediment (1.8E-5) is used for the fuel due to possible oxide layers on the outside of the fuel.

^eThe annual unabated dose was determined using the CAP-88 model. The PET (Ci/yr) was the input, and the models generated the annual dose. The distance to the MEI is 10,499 m to the east of the 105-H Reactor Facility. The CAP88 model summary and synopsis is Presented in BHI calculation number 0100X-CA-V0035, Rev. 3 (BHI 2003b).

^fThe total PTE for Sr-90 was used for Y-90.

^gThe total PTE for Ba-137m was 94.6% of Cs-137.

^hThe release fraction for H-3 is considered to be 1, because it is in a gaseous form.

APQ = annual possession quantity.

FSB = Fuel Storage Basin

PTE = potential-to-emit

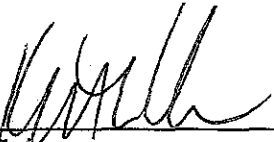
5.0 References

BHI, 2003a, *Radiological Survey Record*, RSR-105D-03-0020, Bechtel Hanford, Inc., Richland, Washington.


BHI, 2003b, *Air Emission Calculations for the 105-D and 105-H Buildings*, Calculation 0100X-CA-V0035, Rev. 3, Bechtel Hanford, Inc., Richland, Washington.

DOE/RL, 2002, *Removal Action Work Plan for 105-D and 105-H Building Interim Safe Storage Projects and Ancillary Buildings*, DOE/RL-2000-57, Rev. 2, U. S. Department of Energy, Richland Operations Office, Richland, Washington.

6.0 Concurrency



Keith A. Klein Date 6/25/03



F. W. Bond Date 7-10-03
State of Washington, Department of Ecology

**Addendum to the Air Monitoring Plan for 116-N-1 (1301-N) Remedial Action
(CCN 081869)**

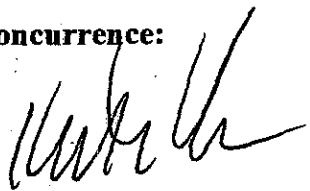
The following changes are proposed to the Air Monitoring Plan for 116-N-1, Section 4.0:

- Elimination of near-facility air monitoring station N105
- Elimination of soil deposition samples taken from proximity of air monitor N105

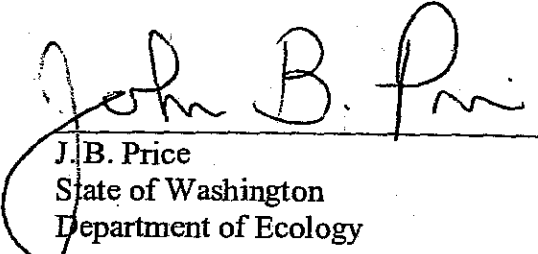
The bases for these changes are:

- Sufficient monitoring from remaining downwind air monitors, N526 and N106.
- N105 air monitor was utilized primarily to monitor potential emissions from remediation of the 116-N-3 waste site, which has been completed. Air monitoring for the 116-N-3 waste site was addressed under a separate air monitoring plan.
- Soil deposition samples continue to be taken from remaining air monitors (N526, N106, and N102).

Concurrence:



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State of Washington
Department of Ecology

